

Remarks

The non-final Office Action dated November 16, 2007, lists an objection to claims 2-5 due to a grammatical error. Claims 1-5 stand rejected under 35 U.S. C. § 102(b) over Dally *et al.* (U.S. Patent No. 4,729,006) and claim 1 stands rejected under 35 U.S.C. § 102(b) over Liou (U.S. Patent No. 5,130,268).

In response to the objection to claims 2-5, Applicant has amended these claims in a manner consistent with that proposed by the Examiner. Thus, Applicant requests that the objection to claims 2-5 be removed.

Applicant respectfully traverses the § 102(b) rejection of claims 1-5 because the cited portions of the Dally reference do not correspond to the claimed invention which includes, for example, aspects directed to a channel stop diffusion that extends under a trench from the outer side to the inner side of the trench. The Office Action cites to Dally's channel stop 40 as allegedly corresponding to the claimed channel stop diffusion. *See, e.g.,* Figure 1 reproduced below.

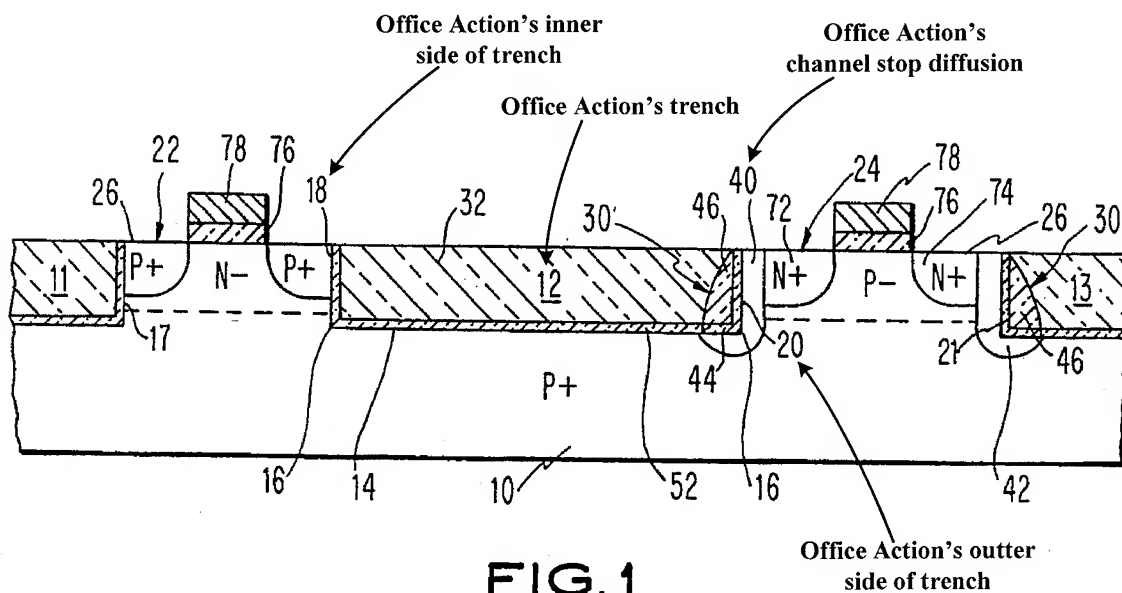


FIG. 1

The Office Action then improperly asserts that Dally teaches that channel stop 40 extends under trench 12 from sidewall 20 to sidewall 18. As is clearly shown in Dally's Figure 5, channel stop 40 does not extend under trench 12 to sidewall 18. Thus, Dally's channel stop 40 does not correspond to the claimed channel stop diffusion. Accordingly, the § 102(b) rejection of claims 1-5 is improper and Applicant requests that it be withdrawn.

Applicant respectfully submits that the § 102(b) rejection of claim 1 over the Liou reference cannot stand because the cited portions of Liou do not correspond to the claimed invention which includes, for example, aspects directed to an asymmetric channel stop diffusion. The cited portions of Liou do not teach that the channel stop implant defines an area of higher doping concentration adjacent to the outer side of trench 10 and an area of lower doping concentration adjacent to the inner side of trench 10. *See, e.g.,* Figure 1b and Col. 5:1-9. Thus, the cited portions of Liou do not correspond to the asymmetric channel stop diffusion of the claimed invention. Accordingly, Applicant requests that the § 102(b) rejection of claim 1 be withdrawn.

Applicant has added new claims 13-17 which depend from claim 1. Applicant respectfully submits that these claims are allowable over the cited references for at least the reasons discussed above in relation to the § 102(b) rejections of claim 1.

In view of the remarks above, Applicant believes that each of the rejections has been overcome and the application is in condition for allowance. Should there be any remaining issues that could be readily addressed over the telephone, the Examiner is asked to contact the agent overseeing the application file, Peter Zawilski, of NXP Corporation at (408) 474-9063 (or the undersigned).

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